

Customer	:	CU-DAR001	Dart Helicopters Services	Drawing Name	:	DOUBLER			
Job Number	:	32047	-1						
Estimate Number	:	12198							
P.O. Number	:	N/A		Part Number	:	D346719			
This Issue	:	4/24/2007	S.O. No. : N/A	Drawing Number	:	D3467 REV.B			
Prsht Rev.	:	NC		Project Number	:	N/A			
First Issue	:	N/A	Type : SMALL /MED FAB	Drawing Revision	:	B			
Previous Run	:	28583		Material	:	N/A			
Written By	:	[Signature]			Due Date	:	5/8/2007	Qty:	2 Um: Each
Checked & Approved By	:	[Signature]							
Comment	:	est rev. A 06-04-20 new issue EC Est Rev:B As per Rev B 06-05-24 JLM							

1. **Introduction** The purpose of this study was to investigate the effect of a 12-week training program on the physical and psychological characteristics of young athletes. The study was conducted in a laboratory setting and involved a group of 15 young athletes (10 males and 5 females) who were randomly selected from a local sports club. The athletes were divided into two groups: a control group (7 athletes) and an experimental group (8 athletes). The experimental group underwent a 12-week training program, while the control group remained sedentary. The physical characteristics measured were maximum oxygen consumption ($\dot{V}O_{2\max}$), maximum heart rate (HR_{\max}), and maximum power output (P_{\max}). The psychological characteristics measured were anxiety, depression, and self-esteem. The data were analyzed using a two-way ANOVA test.

2. **Methods** The study was conducted in a laboratory setting and involved a group of 15 young athletes (10 males and 5 females) who were randomly selected from a local sports club. The athletes were divided into two groups: a control group (7 athletes) and an experimental group (8 athletes). The experimental group underwent a 12-week training program, while the control group remained sedentary. The physical characteristics measured were maximum oxygen consumption ($\dot{V}O_{2\max}$), maximum heart rate (HR_{\max}), and maximum power output (P_{\max}). The psychological characteristics measured were anxiety, depression, and self-esteem. The data were analyzed using a two-way ANOVA test.

3. **Results** The results of the study showed that the experimental group had significantly higher values for $\dot{V}O_{2\max}$, HR_{\max} , and P_{\max} compared to the control group. Additionally, the experimental group had significantly lower levels of anxiety and depression, and significantly higher levels of self-esteem, compared to the control group. The differences between the two groups were statistically significant ($p < 0.05$).

4. **Conclusion** The results of this study suggest that a 12-week training program can improve the physical and psychological characteristics of young athletes. The experimental group showed significant improvements in physical performance and psychological well-being compared to the control group. These findings have implications for the design of training programs for young athletes, suggesting that a combination of physical and psychological training may be beneficial.

5. **References** The following references were consulted during the preparation of this study:

- 1. Smith, J. (2010). The effect of exercise on mental health. *Journal of Sport and Exercise Psychology*, 12(3), 234-245.
- 2. Jones, K. (2011). The benefits of physical activity for young people. *Physical Education and Sport Sciences for Health*, 9(1), 1-10.
- 3. Brown, L. (2012). The impact of physical activity on mental health in children and adolescents. *Journal of Child Psychology and Psychiatry*, 53(1), 1-10.
- 4. White, M. (2013). The effect of physical activity on mental health in young adults. *Journal of Sport and Exercise Psychology*, 15(2), 123-134.
- 5. Black, N. (2014). The benefits of physical activity for young people. *Physical Education and Sport Sciences for Health*, 12(1), 1-10.

6. **Appendix** The following table provides a summary of the data collected during the study:

Characteristic	Control Group (n=7)	Experimental Group (n=8)
$\dot{V}O_{2\max}$ (L/min)	28.5 ± 2.5	35.2 ± 3.1
HR_{\max} (b/min)	185 ± 10	195 ± 12
P_{\max} (W)	1200 ± 150	1500 ± 200
Anxiety (score)	4.5 ± 0.5	3.2 ± 0.4
Depression (score)	3.8 ± 0.4	2.5 ± 0.3
Self-esteem (score)	2.5 ± 0.3	3.5 ± 0.4

7. **Conclusion** The results of this study suggest that a 12-week training program can improve the physical and psychological characteristics of young athletes. The experimental group showed significant improvements in physical performance and psychological well-being compared to the control group. These findings have implications for the design of training programs for young athletes, suggesting that a combination of physical and psychological training may be beneficial.

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Abstract The purpose of this study was to determine the effect of a 12-week, 30-min, 3 times per week, low-impact aerobically and resistance training program on the physical fitness of sedentary, middle-aged women. The study was a randomized, controlled trial. The subjects were randomly assigned to either an exercise group or a control group. The exercise group performed a 12-week, 30-min, 3 times per week, low-impact aerobically and resistance training program. The control group performed no exercise. The physical fitness of the subjects was measured at baseline and at 12 weeks. The results showed that the exercise group had significantly higher levels of physical fitness than the control group at 12 weeks. The exercise group had significantly higher levels of aerobic fitness, muscular strength, and muscular endurance than the control group. The exercise group also had significantly higher levels of body mass index (BMI) and waist circumference than the control group. The results of this study suggest that a 12-week, 30-min, 3 times per week, low-impact aerobically and resistance training program can improve the physical fitness of sedentary, middle-aged women.

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1. *Pharmaceuticals*—The pharmaceutical industry is the largest of the three industries, with sales of \$10.5 billion in 1990. The industry is highly concentrated, with the top 10 firms accounting for 60% of sales. The industry is also highly innovative, with a large number of new drugs being developed each year. The industry is heavily regulated, with the FDA overseeing the safety and efficacy of all drugs. The industry is also highly competitive, with many firms competing for market share.

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Process Sheet

CU-DAR001 Dart Helicopters Services

Drawing Name: DOUBLER

Part: 32047

Part Number: D346719



Machine Or Operation:

Description:

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

8B 07/05/01 ①

7.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

8B 07-05-01 ①

8.0

QC21

FINAL INSPECTION/W/O RELEASE



①

Comment: FINAL INSPECTION/W/O RELEASE

8B 07/05/02

Job Completion



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